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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/696,361	10/30/2003	Yoshisada Nakamura	Q78213	7587

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EXAMINER

LEE, SUSAN SHUK YIN

ART UNIT PAPER NUMBER

2852

DATE MAILED: 06/28/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/696,361	Applicant(s) NAKAMURA ET AL.	
	Examiner Susan S. Lee	Art Unit 2852	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-3, 5, 7, 8, 11-15 and 17 is/are rejected.
- 7) ☒ Claim(s) 4, 6, 9, 10, 16, 18 and 19 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>10/30/03</u> . | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Specification

The abstract of the disclosure is objected to because on page 94, line 11, "means" should be avoided in the abstract. Correction is required. See MPEP § 608.01(b).

Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

Claim Objections

Claims 8 and 17 are objected to because of the following informalities:

As to claim 8, line 4, "a fixing roller" and line 5, "a fixing belt" is unclear because there is a previous recitation of a fixing roller and a fixing belt.

As to claim 17, line 4, "a fixing roller" and line 5, "a fixing belt" is unclear because there is a previous recitation of a fixing roller and a fixing belt.

Appropriate correction is required.

Claim Rejections - 35 USC § 102

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The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this

Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-3, 5, 7, 14, and 15 are rejected under 35 U.S.C. 102(b) as being anticipated by Miyabayashi et al. (5,138,390).

Miyabayashi et al. discloses using a cleaning sheet 11 used to clean the fixing roller and pressing roller of stains. The cleaning sheet 11 have a size of 220 mm x 300 mm or 220 mm x 220 mm (note column 6, lines 32-35). The sheet is also coated with ethylene-vinyl acetate copolymer that is also thermoplastic resin. Note column 3, lines 30-68 and column 4, lines 1-9. The fixing roller 1 has an outer diameter of 20 mm. Note column 5, lines 13-16. This reveals that the perimeter of the fixing roller 1 is equal to $\pi \times \text{diameter}$, that is $\pi \times 20 \text{ mm}$ or $3.14 \times 20 \text{ mm} = 62.8 \text{ mm}$ or 6.28 cm is less than 220 mm or 20 cm. The difference is 13.72 cm that reads on claim 3.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

Art Unit: 2852

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 3, and 11-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sato (6,501,936) in view of Miyabayashi et al. (5,138,390).

Sato discloses a fixing device heating mechanism 10 with an endless belt 16 made of a nickel substrate layered with a silicone rubber and PFA. The belt 16 has the circumference length of 70 ± 5 mm. note column 5, lines 20-43.

Sato differs from the instant invention by not disclosing using a cleaning sheet having a length greater than the fixing belt's perimeter.

Miyabayashi et al. discloses using a cleaning sheet 11 used to clean the fixing roller and pressing roller of stains. The cleaning sheet 11 has a size of 220 mm x 300 mm 220 mm x 220 mm (note column 6, lines 32-35). The sheet is also coated with ethylene-vinyl acetate copolymer that is also thermoplastic resin. Note column 3, lines 30-68 and column 4, lines 1-9.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the apparatus and method of Sato with that of Miyabayashi et al. so that stains on fixing belts can be further removed.

Claims 8 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sato, as modified by Miyabayashi et al. as applied to claims 1, 3, and 11-15 above, and further in view of Chen et al. (2001/0021491).

Sato, as modified by Miyabayashi et al., differ from the instant invention by not disclosing a cooling device.

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Chen et al. discloses a blower 16 used to cool the fixing belt 14. Note column 6, paragraph [0052].

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the apparatus and method of Sato in view of Miyabayashi et al. so that the fixing belt can be cooled to prevent from overheating.

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Nakajima et al., Otsuka et al., Sugirua, Kishino et al., and Tsuruya disclose art in cleaning the fixing device.

Allowable Subject Matter

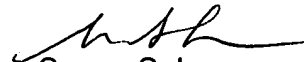
Claims 4, 6, 9, 10, 16, 18, and 19 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Susan S. Lee whose telephone number is 571-272-2137. The examiner can normally be reached on Mon. - Fri., 10:30-8:00, Second Monday Off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Art Grimley can be reached on 571-272-2136 or 571-272-2800 (Ext. 52). The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Susan S. Lee
Primary Examiner
Art Unit 2852

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